

A7

09/787962

JC03'Rec'd PCT/PTO 22 MAR 2001

SEQUENCE LISTING

<110> The University of British Columbia et al.

<120> A PLANT LONG CHAIN FATTY ACID BIOSYNTHETIC ENZYME

<130> 4810-58563

<140> NOT YET ASSIGNED

<141> 2001-03-22

<150> PCT/CA00/00860

<151> 2000-07-22

<150> US60/145,013

<151> 1999-07-22

<160> 5

<170> PatentIn Ver. 2.0

<210> 1

<211> 2509

<212> DNA

<213> Arabidopsis sp.

<400> 1

```

tggtgtggag gacttgtgag aaccaccacc agagtccgac atcgcgatca cggagtagag 60
aaagtcaaaa ctacttctct cagacggatt agtttggttt gctggagatt gttccaagaa 120
agagaaacgt taggagcaaa caaacaaaag agaaaagacg atgatgactg atgagagctt 180
taacaaaaaa ataaaatgag agagctcaac gggtagaatt gtgagacttg agagagtgtt 240
tcctatttaa ggcattgcgatt tagtgtttat tacgagaatg ccaccgaacg agtacatatt 300
aatgtatagt atgttaatga tagtctaact aaaatttggg ttttattgaa atagaatttt 360
gtaagaataa tgaggatctg taatatagct ggatttgcat taaatcgtac gccgttggtg 420
atcgaaatta gttaaataaa tgttttagca tataatgttg gtgcttccga catgtttatt 480
ggacaataat accatatattt ttctttggga tcttaaaaaa attgaggaag aaaatagtaa 540
aatagtcaaa cttaggttac atcataatgg gccaatctt tgagttgtga ttgatctcca 600
aagatataca tagatttaca caagatcaaa agaaaaacaa ttgggcctaa accccaagcc 660
catatcaacg tccattatca ttaagattcc ttttttctt gaaatttgaa aatttgaaat 720
tcgattcaaa tctactctct ctgttttttt cccataaaaa tctgaaaaac cagaagcttc 780
ttcatcactt ttcctcttga tatcttccat tagttggccg atacacatga cgccaaatac 840
atcaatggcg actcttctct gtttttttagt tatatcaaac tcccacccaa cctgcagaag 900
aaaaaatggt gtctataaac acatcccctt acgatttctt ctctatctct ctcacagtat 960
ctatatatac gcacacaaac ccagattcag tttctcatca gtatcatcaa caaaaatatc 1020
aaagattctg ctttagaaaac tgtccatgga tgctaattgga ggacctgtac agatccggac 1080
ccaaaactac gtcaagcttg gttatcacta tctgatcact cactttttta aactcatgtt 1140
cctccctcta atggctgttt tgttcatgaa tgtctcattg ttaagcctaa accatcttca 1200
gctctattac aattccaccg gattcatctt cgtcattact ctcgccattg tcggatccat 1260
tgtcttcttc atgtctcgac ctagatccat ctaccttcta gattactctt gctacctccc 1320
gccttcgagt caaaaagtta gctaccagaa attcatgaac aactctagtt tgattcaaga 1380
tttcagcgaa acttctcttg agttccagag gaagatcttg attcgctctg gtctcgggtg 1440
agagacttat ttaccggatt ctattcactc tatccctccg cgtcctacta tggctcgagc 1500
gcgtgaagaa gcggagcagg taatcttcgg tgcactcgac aatcttttcg agaatacaaa 1560
aatcaatcct agggagattg gtgttcttgt tgtgaattgt agtttgttta accctacgcc 1620
ttctttatcc gccatgattg ttaacaagta taagcttaga ggaaacatta agagctttta 1680
ccttgaggga atgggatgta gtgctggtgt tatcgcggtg gatctagcta gtgatattgt 1740
acaaatccat aggaacactt ttgctcttgt ggtagtact gagaacatca ctcagaattg 1800

```

gtattttggt	aacaagaaag	caatggtgat	ccctaattgc	ttgttttagag	ttggtgggttc	1860
cgcggttctg	ctttcgaaca	agccttttga	tcgaaaacga	tccaagtata	agcttggttca	1920
tacggtcagg	actcataaag	gatctgatga	gaacgcattc	aattgtgtgt	atcaagaaca	1980
agatgagtgt	ttgaaaaccg	gagtttcttt	gtctaaagat	cttatggcta	tagctggaga	2040
agcttttaaag	acgaatatca	cttcttttggg	tcctctgggt	cttcctataa	gcgagcagat	2100
tctgttcttt	gcgacttttg	ttgctaagag	attgttcaat	gacaagaaga	agaagcctta	2160
cataccggat	ttcaagcttg	ctttagatca	tttctgtatt	cacgcgggag	gtagagccgt	2220
gattgatgag	ctagagaaga	gtttaaagct	ttctccaaaa	catgttgagg	cgtctagaat	2280
gactttgcat	agatttgga	acacttcctc	tagctctata	tggtatgaat	tggcttacac	2340
ggaagctaaa	ggaagaatga	ggaaaggaaa	cagagtttgg	cagattgctt	ttggtagcgg	2400
gtttaagtgt	aacagcgcg	tttgggtggc	tcttcgcaat	gtcgagccct	cggttaacaa	2460
tccttgggaa	cattgcatcc	atagatatcc	ggttaagatc	gatctttga		2509

<210> 2
 <211> 20
 <212> DNA
 <213> Arabidopsis sp.

<400> 2	
gtatcatcaa caaaaatatc	20

<210> 3
 <211> 18
 <212> DNA
 <213> Arabidopsis sp.

<400> 3	
caaagatcga tcttaacc	18

<210> 4
 <211> 18
 <212> DNA
 <213> Arabidopsis sp.

<400> 4	
cgatcacgga gtagagaa	18

<210> 5
 <211> 18
 <212> DNA
 <213> Arabidopsis sp.

<400> 5	
ggacagtttc taaagcag	18